

**ELECTROPLATED COPPER INTERCONNECTION STRUCTURE,  
PROCESS FOR MAKING AND ELECTROPLATING BATH**

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**ABSTRACT OF DISCLOSURE**

Interconnect structures with copper conductors being at least substantially free of internal seams or voids are obtained employing an electroplating copper bath containing dissolved cupric salt wherein the concentration of the salt is at least about 0.4 molar and  
10 up to about 0.5 molar concentration of an acid. Also provided are copper damascene structures having an aspect ratio of greater than about 3 and a width of less than about 0.275  $\mu\text{m}$  and via openings filled with electroplated copper than is substantially free of internal seams or voids.